

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
A Proposal for Revising the MDS and ITFS)	RM-10586
Regulatory Regime)	DA 02-2732

COMMENTS OF QUALCOMM INCORPORATED

QUALCOMM Incorporated hereby submits these comments in response to the Commission's Public Notice on "A Proposal for Revising the MDS and ITFS Regulatory Regime," submitted by the Wireless Communications Association International, Inc., the National ITFS Association and the Catholic Television Network ("proponents") on October 7, 2002, DA 02-2732 (released October 17, 2002) ("Proposal").

QUALCOMM applauds the proponents for their efforts to develop a proposal that will provide licensees of the 2500-2690 MHz band with sufficient flexibility to facilitate the introduction of spectrally efficient, two-way fixed and mobile services, while continuing to enable one-way video services. With the adoption of appropriate measures to minimize interference amongst licensees in the band, the recommendations contained in the Proposal should help the Commission in its efforts to promote the use of the band for advanced mobile and fixed terrestrial wireless services, including high-speed broadband access.

As part of its efforts to implement a market-based approach and introduce additional flexibility in this band, the Commission set the goal of providing "regulatory neutrality to help

establish a level playing field across technologies and foster more effective competition.”¹ To further that goal, the Commission first amended its rules to permit MDS and ITFS licensees to provide two-way services, and then later amended its rules again to permit mobile services in the band. QUALCOMM fully supports these efforts, as well as the Commission’s related spectrum management objectives of enhancing spectrum efficiency, while minimizing harmful interference.

QUALCOMM is a leader in the development of Code Division Multiple Access (“CDMA”) technology, which has been licensed to over 95 leading communications manufacturers worldwide. Due to its unsurpassed voice quality, system capacity, privacy and flexibility, CDMA has been recognized by the International Telecommunication Union (ITU) as the global standard for next-generation, digital wireless communications products and services, also known as IMT-2000. In an effort to coordinate the deployment of IMT-2000 worldwide, the ITU has identified several frequencies bands, including the 2500-2690 MHz band, for use by IMT-2000 systems. Given the worldwide interest in using these frequencies for advanced mobile wireless services, such as IMT-2000, QUALCOMM agrees with the proponents that a revision of the Commission’s rules to provide flexibility for the MDS/ITFS licensees to deploy innovative technologies and introduce advanced mobile wireless services will assist the Commission in achieving its spectrum management goals, and will result in myriad other benefits for U.S. consumers and industry.

When the Commission initially adopted rules for the use of the 2500-2690 MHz band for MDS and ITFS applications, the services envisioned for the band were wireless cable and educational television. In keeping with that vision, the Commission adopted technical rules similar to those for broadcast television. However, the Commission also retained flexibility for MDS to be used for voice and data services.

Over the past several years, the licensees of the 2500-2690 MHz band have been working to develop a plan that would enable them to take advantage of the flexibility afforded to them by

¹ Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, and Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile-Satellite Service, *First Report and Order and Memorandum Opinion and Order*, ET Docket No. 00-258 (September 6, 2001) (para. 20) (“Advanced Wireless Services Order”).

the Commission and expand their current service offering to include two-way, wireless broadband services without disrupting the current provisioning of one-way video services. As part of that effort, the MDS and ITFS community tested a variety of new technologies that were designed to operate according to the Commission's existing rules for the band in an attempt to offer two-way, broadband data services.² These technologies required line-of-sight between the base station and the subscriber unit, which severely limited the number of potential subscribers that could be served by these systems.³ In addition, none of these technologies benefited from global economies of scale or interoperability with other advanced wireless systems being deployed in other frequency bands. As a result of the difficulties experienced by the MDS/ITFS community with these technologies, the use of the 2500-2690 MHz band for broadband wireless access was only minimally successful.

At the same time, other innovative and spectrally efficient technologies, such as IMT-2000, have been developed for use in commercial cellular systems. These cellular technologies support both high-quality, high-capacity voice services, as well as a wide range of high-speed data services. The Commission's flexible use policies and service rules for the commercial cellular frequency bands have spurred these new technology developments and investment, and have enabled U.S. wireless service providers to be among the first in the world to offer their customers a wide range of robust, high-quality voice and high-speed data services.

With similar flexible use policies and sufficient contiguous spectrum, licensees of the 2500-2690 MHz band should have the opportunity to take advantage of the significant advances in cellular technology, like IMT-2000, and provide another competitive option for American consumers to gain access to broadband services. MDS/ITFS licensees will also benefit from a highly competitive marketplace with multiple equipment suppliers, and from interoperability with other commercial wireless systems both domestically and internationally.

In its review of the Proposal, QUALCOMM notes that there may be certain difficulties associated with permitting the use of either FDD or TDD services in the "Lower Band Segment" and the "Upper Band Segment" due to the interference problems that result from adjacent FDD/TDD operations.⁴ QUALCOMM is an avid supporter of the Commission's flexible use

² Proposal, p. 5.

³ Id.

⁴ Id., p. 15.

policies, and agrees with the proponents that such flexibility should be one of the Commission's primary objectives for the band. However, as the Commission proceeds with a review of its service rules for the band, it should consider both the advantages and disadvantages of adjacent FDD/TDD operations, which will need to be addressed.

QUALCOMM once again applauds the MDS/ITFS community for taking this important step of developing a proposal to make more efficient use of the 2500-2690 MHz band, and to facilitate the introduction of advanced wireless communications services. A revision of the service and technical rules for the 2500-2690 MHz band that permits deployment of innovative technological solutions, such as IMT-2000, will enable the Commission to meet its objective of providing "Americans with another option for high-speed broadband access, furthering competition with other service providers such as digital subscriber line ("DSL"), cable modem, or satellite-based services provided by incumbent telephone companies, cable operators, or satellite operators."⁵

Respectfully submitted,

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⁵ Advanced Wireless Services Order, para. 19.